

Interstate Renewable Energy Council (IREC) “Connecting to the Grid” Project Comprehensive Interconnection Rules for Distributed Generation (Updated July 2005)

State (Utility) ¹	Effective or in Progress (IP) ²	Application Cost	Separate Rules for Small DG & Renewables ³	Breakpoint for Small System (Simplified) Rules	Eligible Technologies	System Size Limit	Standard Agreement	Additional Insurance	External Disconnect Switch Required	Screening Process for Interconnection Studies	Network IC Addressed	Agency / Authority
Arizona	IP	10 kW: \$20; 2 MW: \$1/kW; for 10 MW non-export; \$2/kW; others at cost	No	10 kW 500 kW 2 MW 10 MW non- export 10 MW	All DG	NA	Yes	No	No	Yes	Yes	Arizona Corporation Commission
Arizona (SRP)	2002		No	50 kW	All DG	NA	Yes	Yes	No	Yes	No	Utility
Arizona (APS)	2002		No	50 kW	All DG	NA	Yes	Yes	No	Yes	No	Utility
Arizona (TEP)	2002		No	50 kW	All DG	NA	Yes	Yes	No	Yes	No	Utility
California	2000	\$800 (plus \$600 for supp. review)	Yes	10 kW	All DG	10 MW	Yes	No	Yes (systems > 1 kW)	Yes	No	CA PUC
Colorado	IP	TBD ⁴	No	10 kW 2MW 10 MW	All DG	10 MW	Yes	Yes	TBD	Yes	Yes	CO PUC
Colorado (Co-ops)	2002	None	Varies by utility	Varies by utility	Renewables	NA	No	No	Yes	No	No	CO Legislature
Colorado (Xcel)	1996	None	Yes	100 kW	All DG	NA	Yes	Yes	Yes	No	No	CO PUC
Connecticut	2004	Yes	Yes	10 kW	All DG	25 MW	Yes	Yes	Yes	Yes	Yes	CT DPUC
Delaware (Conectiv; DEC)	2000 (update IP)	None	Yes	25 kW	All DG	Conectiv: 1 MW; DEC: none	Yes (Conectiv)	Yes (DEC)	Yes (systems 25 kW - 1 MW)	No	No	DE PSC

¹ Interconnection rules that apply only to specific utilities or were developed by particular utilities are listed in parentheses.

² For states listed as in progress (IP), information is based either on draft rules or likely consensus positions among stakeholders.

³ Many states and utilities have a separate set of interconnection rules for very small (e.g. < 25 kW) renewable and DG systems. Frequently, such rules are tied to a state’s net-metering rules.

⁴ TBD = To be determined. This applies to states or utilities with ongoing discussions, and particular aspects of the rules are still under consideration

Sources: The Interstate Renewable Energy Council (IREC) and the N.C. Solar Center (NCSC). “Connecting to the Grid” Project web site, www.irecusa.org/connect, 7/18/05; Database of State Incentives for Renewable Energy (DSIRE), www.dsireusa.org, 7/18/05. Additional information, including most legislative and regulatory source citations, is available via DSIRE.

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Hawaii	2003		Yes	50 kW	All DG	NA	Yes	No	Yes	No	No	HI PUC
Idaho (Idaho Power)	2002		Yes	100 kW	All DG	> 1 MVA	No	No	Yes	No	No	ID PUC
Idaho (Avista Utilities)			Yes	25 kW	All DG	1 MW	Yes	No	Yes	No	No	ID PUC
Illinois (ComEd)	1999		Yes	25 kW (40 kW for net-metered systems)	All DG	NA	Yes	No	Yes (systems > 40 kW)	No	Not allowed (applies to downtown Chicago)	Utility
Indiana	IP	TBD	Yes	10 kW	All DG	TBD	TBD	TBD	TBD	TBD	No	IN URC
Iowa	IP	TBD	TBD	TBD	All DG	TBD	TBD	TBD	TBD	TBD	TBD	IA DNR
Kansas	2004	ND	No	ND	All DG	5 MW	Yes	ND	Yes	ND	No	KCC
Massachusetts	2004	\$3 per kW; \$2,500 max	Yes	10 kW	All DG	None	Yes	No	Utility discretion	Yes	Yes	MA DTE
Michigan	2003	\$0.50 per kW; \$500 max	Yes	30 kW	All DG	None	Yes	No	Yes	No	No	MI PSC
Minnesota	2004	Varies by system size and type	Yes	40 kW	All DG	10 MW	Yes	Yes (systems < 40 kW)	Yes	Yes	TBD	MN PUC
Missouri	2003		Yes	100 kW	All DG	100 kW	Yes	No	Yes	No	No	MO PSC
New Jersey	1999 (rules mandatory for Class I renewables)	10 kW: none; up to 2 MW: \$50+\$1/kW; other: \$100+\$2/kW	Yes	10 kW	All DG	20 MW	Yes	No	No	Yes	Yes	NJ BPU

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New York	2000	Varies by system size	Yes	10 kW	All DG	300kW (2 MW limit considered)	Yes	Yes	Yes	Yes	Yes	NY PSC
North Carolina	2005	\$100 residential; \$250 non- residential	No	20 kW residential; 100 kW non- residential	All DG	100 kW	Yes	No	Yes	No	No	NCUC
Ohio	2001	Varies	Yes	25 kW	All DG	300 kW	Yes	No	Utility discretion	No	No	OH PUC
Pennsylvania	IP	TBD	Yes	2 MW	TBD	10 MW	Yes	TBD	TBD	Yes	TBD	CO AEPS (initiative)
Texas	2000	Varies	Yes	10 kW	All DG	10 MW	Yes	No	Yes	Yes	Yes	TX PUC
Vermont	IP	TBD	Yes	15 kW	All DG	50 MW	TBD	TBD	Yes	TBD	TBD	
Virginia	IP	TBD	Yes	10 kW residential; 25 kW non- residential	All DG	10 MW	Yes	No	Utility discretion	No	No	VA SCC
Wisconsin	2004	Varies	Yes	20 kW	All DG	15 MW	Yes	No	Yes	No	No	WI PSC
<i>IREC Model¹³</i>	<i>NA</i>	<i>Varies</i>	<i>Yes</i>	<i>25 kW</i>	<i>All DG</i>	<i>20 MW</i>	<i>Yes</i>	<i>No</i>	<i>No</i>	<i>Yes</i>	<i>Yes</i>	<i>NA</i>

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¹³ See www.irecusa.org/connect/model_interconnection_rule.pdf.